UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,815	02/19/2002	Adam R. Schran	10397-3U1	7133

570   7590   03/16/2009
PANITCH SCHWARZE BELISARIO & NADEL LLP
ONE COMMERCE SQUARE
2005 MARKET STREET, SUITE 2200
PHILADELPHIA, PA 19103

EXAMINER
GOLD, AVI M

ART UNIT	PAPER NUMBER
2457	

MAIL DATE	DELIVERY MODE
03/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-27 and 29-56* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-27 and 29-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____

DETAILED ACTION

This action is responsive to the amendment filed on January 12, 2009. Claims 7

and 34 were amended. Claims 2-27 and 29-56 are pending.

Response to Amendment

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 34 teaches an article of manufacture

comprising computer-readable program code, which can be implemented on software.

The idea that the article of manufacture can be embodied fully in software makes the

system software per se and non-statutory.

Claims 29-33, 35-54, and 56 are necessarily rejected as being dependent upon

the rejection of claim 34.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Step (a) in which a plurality of groups of network configuration settings are defined for the user's client machine is not found in the specification. The specification only discloses choosing predefined configuration settings for a client machine, not defining them. Step (e) that refers to the newly amended step (c) is not found in the specification. The specification does not disclose repeating the step of selecting a group of configuration settings on the user's client machine. In addition, the limitation that states "not on the network used for the network connection established between the user's client machine and a remote server" is not found in the specification and is a negative limitation; see 2173.05(i) of the MPEP for further explanation.

Claims 2-6, 8-27, 29-33, and 35-56 are necessarily rejected as being dependent upon the rejection of claims 7 and 34.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 2-3, 5-12, 14, 18, 23, 26, 27, 29-30, 32-39, 41, 45, 50, and 53-56 are

rejected under 35 U.S.C. 103(a) as being unpatentable over Claessens et al., U.S.

Patent No. 7,222,255, further in view of Rehkopf, U.S. Patent No. 6,505,249.

Claessens teaches the invention substantially as claimed including a system and

method for network performance testing (see abstract).

Regarding claims 7 and 34, Claessens teaches a method and an article of

manufacture a method and article of manufacture of optimizing network configuration

settings for a user's client machine, the method and article of manufacture comprising:

(a) defining a plurality of groups of network configuration settings (col. 10, lines

15-25, Claessens discloses different test configurations associated with identifiers);

(b) establishing a network connection between the client machine and a remote

server (col. 7, line 65 — col. 8, line 3, col. 8, lines 28-33, Claessens discloses a

communication session established between a client and server);

(c) selecting one of the groups of configuration settings for the client machine

from the defined groups of settings (col. 10, lines 33-41, Claessens discloses choosing

a configuration setting from the inventory database);

(d) automatically conducting one or more performance tests using the selected

network configuration settings during the established network connection (col. 10, lines

42-63, Claessens discloses a network performance test with the selected configuration

settings);

Claessens fails to teach the limitation further including defining settings for the

user's client machine; wherein step (c) is initiated on the user's client machine and not

on the network used for the network configuration established between the user's client

machine and a remote server; repeating steps (c) and (d) for one or more other groups

of network configuration settings during the established network connection and

automatically adjusting the network configuration settings of the client machine, based

on the results of the performance tests, wherein the adjusted network configuration

settings are settings that optimize the performance of the client machine.

However, Rehkopf teaches a method for benchmarking and optimizing the end

to end processing performance of a client-server based computer system to determine

the optimal values of the system variables (see abstract). Rehkopf teaches

performance settings for each system (col. 2, lines 21-30, 51-58), performance

variables chosen on a system (column 5, lines 28-54), different benchmarking tests

being performed (col. 2, line 59 – col. 3, line 11) and the optimal value of the

performance variables chosen to modify the system and optimize performance (col. 6,

lines 37-45).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Claessens in view of Rehkopf to define settings for the user's client

machine; wherein step (c) is initiated on the user's client machine and not on the

network used for the network configuration established between the user's client

machine and a remote server; repeat steps (c) and (d) for one or more other groups of network configuration settings during the established network connection and automatically adjust the network configuration settings of the client machine, based on the results of the performance tests, wherein the adjusted network configuration settings are settings that optimize the performance of the client machine. One would be motivated to do so because it allows for the use of the most efficient network configuration settings.

Regarding claims 2 and 29, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that performs statistical analysis on past network configuration setting performance test result data (col. 3, lines 13-26, col. 7, lines 3-10, Rehkopf discloses the use of statistical analysis and a statistical algorithm on past performance on the client).

Regarding claims 3 and 30, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein regression is used to perform the statistical analysis (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 5 and 32, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 6 and 33, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the remote server (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 8 and 35, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) the user specifying, via the client machine, at least one network performance preference; and

(h) executing performance metric scoring on each of the different defined groups of network configuration settings, based on a relative weight assigned to the network performance preference (col. 2 and 3).

Regarding claims 9 and 36, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein logic running on the remote server statistically analyzes the results of the performance tests and determines one or more groups of network configuration settings for use on the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 10 and 37, Rehkopf teaches the method and article of manufacture of claims 9 and 36 wherein the logic includes an intelligent optimization algorithm which uses historical performance data to statistically assess positive or

negative scoring variations when a particular network configuration setting is adjusted

(col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 11 and 38, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein the adjustments of the network configuration

settings are made through the use of an algorithm that determines future groups of

network configuration settings to test (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 12 and 39, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 further comprising:

(g) continually monitoring the network configuration performance of the client

machine, after step (f) has been performed; and

(h) automatically adjusting the monitored network configuration settings of the

client machine to maintain optimal network performance of the client machine (col. 4,

lines 35-54, Rehkopf discloses continually monitoring performance and re-evaluating).

Regarding claims 14 and 41, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein one of the network configuration settings is

latency (col. 8, lines 1-19, Rehkopf discloses bandwidth).

Regarding claims 18 and 45, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is Maximum Segment Size (MSS) (col. 8, lines 1-19, Rehkopf discloses segment size).

Regarding claims 23 and 50, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is packet size (col. 8, lines 1-19).

Regarding claims 26 and 53, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) assigning a percentage score to each applicable network configuration setting;

(h) multiplying the relative weight of each network configuration setting by the percentage score for the network configuration setting, wherein the relative weight is determined as a function of the user's network performance preferences; and

(i) adding the resulting products of step (h) to determine a weighted overall percentage score (col. 2, 3).

Regarding claims 27 and 54, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein step (b) further comprises:

(c)(i) the user selecting a group of default network configuration settings (col. 2, lines 23-30).

Regarding claims 55 and 56, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) storing the plurality of groups of network configuration settings in a storage location wherein step (c) further comprises selecting one of the groups of network configuration settings for the client machine from the storage location (col. 2, 3).

5.   In considering claims 4 and 31, Claessens and Rehkopf are silent in that a polynomial curve fit is used to perform statistical analysis. "Official notice" is taken that both the concept and the advantages of a polynomial curve fit are well known in the art. It would have been obvious to one skilled in the art to utilize a polynomial curve fit as an efficient way to perform statistical analysis.

In considering claims 15-17, 19-22, 24, 25, 42-44, 46-49, 51, and 52, Rehkopf is silent in that ping time, network connection stability, Maximum Transmission Unit (MTU), Receive Window (RWIN), Time To Live (TTL), Black Hole Detection, Auto Discovery of Path Maximum Transmission Unit (MTU), upload throughput speed, and download throughput speed are various forms of network configuration settings. "Official notice" is taken that both the concept and the advantages of those settings are well known in the art. It would have been obvious to one skilled in the art to analyze and adjust those settings in the network to monitor and optimize the performance of a network.

6.   Claims 13 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Claessens and Rehkopf further in view of Easty et al., U.S. Patent No. 6,189,008.

Claessens teaches the invention substantially as claimed including a system and

method for network performance testing (see abstract). Rehkopf teaches the invention

substantially as claimed including a method for benchmarking and optimizing the end to

end processing performance of a client-server based computer system to determine the

optimal values of the system variables (see abstract).

Regarding claims 13 and 40, Claessens and Rehkopf teach the method and the

article of manufacture of claims 7 and 34.

Claessens and Rehkopf fail to teach the limitation further including (g) storing on

the remote server, groups of network configuration settings and aggregate test results

associated with other client machines that previously established a network connection

with the remote server; and (h) the user's client machine receiving groups of network

configuration setting recommendations from the remote server based on the groups of

network configuration settings and the aggregate test results stored on the remote

server.

However, Easty teaches managing the digital assets of the endpoint servers

based on aggregate profile information reflecting the preferences of the user population

served by the endpoint server (see abstract). Easty teaches the use of contents

recommended to a user from a database, on a server, which is based on aggregate

profile that reflects the preferences of the end-user population (col. 4, line 66 – col. 5,

lines 7; col. 5, lines 35-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Claessens and Rehkopf in view of Easty to store on the remote server, network configuration settings and aggregate test results associated with other client machines that previously established a network connection with the remote server, wherein the user's client machine receives network configuration setting recommendations from the remote server, based on the network configuration settings and the aggregate test results stored on the remote server. One would be motivated to do so because it allows for quicker and more accurate configuration settings.

Response to Arguments

7.   Applicant's arguments with respect to claims 2-27 and 29-56 have been considered but are moot in view of the new ground(s) of rejection.

8.   Applicant's arguments, filed January 12, 2009, regarding the use of Claessens, Rehkopf, and Easty have been fully considered but they are not persuasive.

9.   In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

10.   In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is

generally available to one of ordinary skill in the art.

11.   In response to applicant's argument that Easty is nonanalogous art, it has been

held that a prior art reference must either be in the field of applicant's endeavor or, if

not, then be reasonably pertinent to the particular problem with which the applicant was

concerned, in order to be relied upon as a basis for rejection of the claimed invention.

See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case,

Easty is related to user settings/preferences.

Conclusion

12.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

13.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        U.S. Pat. No. 6,842,431 to Clarkson et al.

        U.S. Pat. No. 6,725,229 to Majewski et al.

        U.S. Pat. No. 6,292,483 to Kerstein

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AVI GOLD whose telephone number is (571)272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2457
AMG

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457